REMARKS

Applicant thanks the Examiner for the remarks and analysis contained in the most recent Office Action reopening prosecution. Claims 1, 5 and 13 have been amended. New claims 17-22 are added. Claims 1-22 are currently pending in this application. Applicant respectfully requests reconsideration of this application.

Proposed corrections to Figures 1-6A are enclosed.

The claims 1-16 were rejected under 35 U.S.C. §112. Applicant has already fully responded to this rejection in the previously filed Appeal Brief. Rather than restating Applicant's position, the arguments provided in the Appeal Brief are hereby incorporated into this Response.

Claims 1,2 and 4 were rejected under 35 U.S.C. §102(b) as being anticipated by *Yamagami*. Applicant respectfully traverses the rejection. *Yamagami* specifically requires that its detector contact an external portion of a rope as the rope is wound on the driving sheave. That is the opposite of what is claimed. Therefore, there is no anticipation.

Claim 3 was rejected under 35 U.S.C. §103 as being unpatentable over the combination of *Yamagami* and *Saito*. Applicant respectfully traverses the rejection. Because *Yamagami* teaches the opposite of what is claimed, even combining *Saito* with *Yamagami* would not result in the claimed invention.

Claims 5-16 were rejected under 35 U.S.C. §103 as being unpatentable over *Yamagami* and Applicant's allegedly admitted prior art. Applicant respectfully traverses the rejection. Yet, since *Yamagami* teaches the opposite of what is claimed, combining it

with a statement that a different belt is interchangeable with a rope does not result in the claimed invention.

The new claims are all allowable. *Yamagami* cannot provide the internal wear detection recited in those claims. *Yamagami* relies upon a detector that is immediately adjacent a sheave so that it physically contacts an exterior surface on the rope in the event that the rope is damaged as the rope is wound about the sheave. If the exterior of the rope is damaged, *Yamagami's* device senses an increase in an outside dimension of the rope. *Yamagami* does not provide the ability to determine a wear condition of an internal metallic load bearing member encased in a polyurethane jacket.

The amendments to the specification do not add any new matter. The application serial number 09/280,637, which was filed on March 29, 1999 was incorporated by reference into the originally filed specification for this application. The new Figures 7 and 8 correspond to Figures 1 and 2 in that earlier application. The language incorporated into the specification by amendment above is taken from the earlier application. No new matter has been entered.

Applicant has amended the specification to include the new Figures 7 and 8 and the additional language in the description so that the specification as presented in this Application contains a complete description of all claimed features. In particular, the amendment to the specification provides specific support for the new claims regarding one particular type of belt arrangement useful with this invention.

Applicant encloses a copy of Serial No. 09/280,637 for the Examiner's convenience and consideration.

Applicant respectfully submits that this case is in condition for allowance. If the Examiner would like to discuss any issues regarding this application, Applicant's representative would be happy to discuss them and can be contacted at the telephone number indicated below.

Given that this application has now been pending for some time, Applicant respectfully requests a Notice of Allowance as early as possible.

The fee required for the additionally presented claims is paid by the enclosed Authorization to Charge a Credit Card.

Respectfully submitted,

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Dated: January 30, 2003

CERTIFICATE OF MAILING

I hereby certify that the enclosed Amendment is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Assistant Commissioner of Patents, Washington D.C. 20231 on January 30, 2003.

Theresa M. Palmateer

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APPENDIX 1

"VERSION WITH MARKINGS TO SHOW CHANGES MADE" IN THE SPECIFICATION

Please amend Paragraph 18 (page 4, lines 3-9) as follows:

[0018] --Although those skilled in the art recognize that a plurality of belts may be used, this description refers to a single belt for discussion purposes. The belt 26 preferably includes a plurality of steel cords each having a plurality of strands. As can be appreciated from Figures 7 and 8, the belt 26 in one example has a generally rectangular cross-sectional area of nonferromagnetic insulator material, such as polyurethane, 12 surrounding a plurality of generally uniformally distributed steel ropes 14, each consisting of a plurality of cords 15. As illustrated in Figure 8, each cord 15 comprises a plurality of strands 16. Each strand 16 is made up of a plurality of steel wires 17. Sheaves 28 and 30 guide the belt along a chosen path to move the cab 22 between the various landings. A conventional drive mechanism 32 is associated with the sheave 30 to drive the belt and move the elevator components as desired. The counterweight 24 and cab 22 move within a hoistway (illustrated in phantom at 34) in a conventional manner.

Please amend paragraph 20 (page 4, line 19) as follows:

[0020] The inspection device 40 preferably utilizes the magnetic flux or electrical resistance measurement techniques disclosed in United States Patent Application Serial No. 09/280,637 (Attorney Docket OT-4465), titled, "Method and Apparatus For Detecting Elevator Rope Degradation Using Electrical Or Magnetic Energy," which was filed on March 29, 1999. The teachings of that specification are incorporated into this description by reference. Such devices provide the ability to inspect rope components

that are not viewable, such as in the case of compound ropes or belts including flat ropes in which one or more steel ropes are embedded in an insulator, such as polyurethane or rubber as shown in Figures 7 and 8, for example. The most prevalent modes of deterioration of wire ropes include internal abrasion, corrosion, breaking and kinking. A defect such as a crack, cut or other discontinuity in a ferromagnetic member, such as a wire, can be detected by monitoring magnetic flux density distribution within the belt or rope. Of course, other types of inspection devices may be used within the scope of this invention.

APPENDIX 2

"VERSION WITH MARKINGS TO SHOW CHANGES MADE" IN THE CLAIMS

1. (Twice Amended) An elevator system comprising:

a cab;

at least one rope having a plurality of metallic load bearing members associated with the cab;

at least one sheave that guides the rope as the cab moves; and

an inspection device spaced from the sheave, the inspection device providing [that provides] information regarding a wear condition of a portion of the rope that is most likely to wear when the portion is away from the sheave.

5. (Amended) A method of inspecting at least one belt in an elevator system where the belt is associated with a cab and is guided by at least one sheave, comprising the steps of:

(A) determining a portion of the belt that is most likely to wear;

(B) positioning an inspection device relative to the belt and spaced from the sheave; and

(C) gathering information regarding a wear condition of the portion of the belt that is most likely to wear when the portion is spaced away from the sheave [as the cab moves between chosen positions].

13. (Amended) A method of determining a wear condition of at least one belt in an elevator system where the belt is associated with a cab and is guided by at least one sheave, comprising the steps of:

A) considering at least one of :

a number of bends that the belt experiences as the cab travels between locations,

dimensions of a sheave along which the belt travels,

the manner in which the sheave is supported within the elevator system,

an angle of belt wrap around the sheave, and

a worst case loading on a plurality of portions of the belt;

B) determining a portion of the belt that is most likely to wear based upon the consideration from step (A); and

C) positioning an inspection device relative to the belt and spaced from the sheave such that the inspection device is capable of gathering wear information regarding the portion of the belt from step (B) when the portion is spaced away from the sheave [as the cab moves within the elevator system].

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